

OCEAN MOTIONS

Currents and tides . . . rolling waves and breakers . . . upwellings and tsunamis. The ocean never stops moving—that one thing is for sure! There are constant motions on the ocean. Some of them you want to be in. Some you want to watch. Others you want to hide from. Define each of these motions. Write your definitions on the back of this page.

A. surface current

B. density current

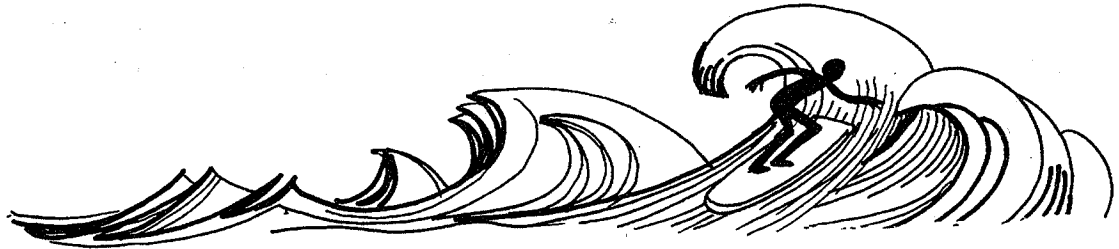
C. waves

D. tides

E. upwellings

F. tsunami

G. surf



Answer these questions or complete these statements about ocean motions.

1. Upwellings bring _____ to the surface of the ocean.
2. Surface currents are caused by _____.
3. What ocean movements are affected by the moon's gravity? _____
4. What direction do most surface currents north of the equator move? _____
5. What direction do most surface currents south of the equator move? _____
6. How do cold currents affect climate? _____
7. How do warm currents affect climate? _____
8. What causes circulation in deep water? _____
9. What two things affect the density of water? _____ and _____
10. Does evaporation of salt water cause density to (increase) or (decrease)? _____
11. Another name for a thermohaline current is _____.
12. Is very salty water more or less dense than less salty water? _____
13. Is cold ocean water more or less dense than warmer water? _____
14. Does polar water diluted by melting ice become more or less dense? _____
15. Does heavy rainfall make ocean water more or less dense? _____
16. Which ocean motion is caused by earthquakes? _____
17. Which ocean motion occurs when a wave strikes the bottom of the ocean? _____

Name _____